

# What is Chloramine?

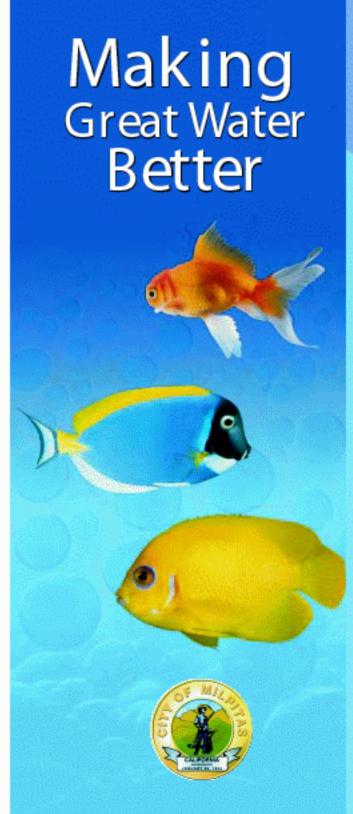
Chloraminated water is safe for people and animals to drink, and for all other general uses. However, as with chlorine, chloramine will need to be removed for fish and amphibian use, and for people or businesses requiring highly treated water.

Precautions must still be taken to remove or neutralize chloramine in the kidney dialysis process, in the preparation of water for fish tanks and ponds, and in businesses using water in treatment processes and beverage manufacturing.

Unlike chlorine, chloramine <u>cannot</u> be removed from water by boiling, or by letting an open container of water stand to dissipate chlorine gas. It can only be neutralized, or removed with specific treatment methods.

Look inside for more details . . .

City of Milpitas 455 E. Calaveras Blvd Milpitas, CA 95035





On February 2, 2004, the San Francisco Public Utilities Commission (SFPUC) will switch from chlorine to chloramine disinfection for drinking water. Chloramine is a combination of chlorine and ammonia that is considered a better disinfectant. Many Bay Area communities are successfully using chloramine disinfection.

The SFPUC provides high quality drinking water to over 2.4 million residential and commercial customers in San Francisco, the Peninsula, South Bay and East Bay. With the conversion to chloramine, our customers will continue to receive the highest quality water which meets or exceeds more stringent present and anticipated regulatory standards.

## Why Chloramine?



Chloramine is regarded as a better disinfectant than chlorine alone, because it lasts longer in water to more effectively remove pathogens such as bacteria and viruses.

Compared to chlorine, chloramine produces lower levels of trihalomethanes, suspected carcinogens that form when chlorine mixes with natural organic substances in water. Customers from other water utilities report improved taste and odor in their water when chloramine disinfection is used.

Most Bay Area utilities and many communities nationwide have already switched to chloramine for drinking water disinfection. Local water providers include: Alameda County Water District, East Bay Municipal Utility District, Marin Municipal Water District, and Santa Clara Valley Water District.

#### What about fish & amphibians?

Chloraminated water can harm fish and amphibians, such as turtles and frogs, as chloramine passes through their gills and directly enters the bloodstream. To protect fish and amphibians, remove chloramine from the water with inexpensive water treatment products (drops or tablets) or specified carbon filters. These products are readily available at most pet supply stores and aquarium dealers.

The following websites are resources for fish and amphibian-related information:

What about dialysis patients and providers?

Like chlorine, chloramine can harm kidney dialysis patients during the dialysis process if it is not removed from water before entering the bloodstream. It is safe for dialysis patients to drink chloraminated water because the digestive process neutralizes chloramine before it enters the bloodstream.



The California Department of Health Services will inspect commercial dialysis facilities and ensure dialysis providers successfully upgrade their dialysis equipment to remove chloramine from the water before the conversion to chloramine takes place. For further information, contact your dialysis provider or the Trans Pacific Renal Network:

(415) 472-8590 www.network17.org

### What about businesses using highly processed water?

Businesses using highly processed water, such as laboratories, microchip manufacturers, biotech companies, breweries, soft drink bottlers and photography labs may also need to take special precautions to ensure their existing water treatment process will remove chloramine from water prior to use. In most cases, a simple process adjustment is needed.

For more information, contact a water treatment professional or your current equipment supplier. These advisors can review your treatment process and make recommendations on any upgrades you may need.



#### Need more information?

Call the City of Milpitas at (408) 586-2605 or visit our website at: www.ci.Milpitas.ca.gov



La información acerca de la Conversión a Cloramina esta disponible en español. Favor de llamar al (408) 586-2605

Chúng tôi có các sắn tin tức về sự hoán đổi của hóa chất chloramine bằng tiếng Việt, xin gọi (408) 586-2605 để yêu cấu có bản cấm nang.

環提供無趣轉換的中文資料·請敦電 (408) 588-2805以集取手册。

www.sfaquarium.org www.sfbakc.org www.aquariacentral.com